

IN THE SPECIFICATIONS

Please amend paragraph [0004] of the application as indicated:

[0004] At the ultra-deep scale, a technology may be employed based on transient field behavior. The transient electromagnetic field method is widely used in surface geophysics. Examples of transient technology are seen, for example, in Kaufman (1979) and Kaufman (1989). ~~et al., 1983, "Frequency and transient soundings", Elsevier Science.~~; Sidorov et al., 1969, "Geophysical surveys with near zone transient EM." Published by NVIGG, Saratov, Russia (in Russian).; and Rabinovich et al., 1981, "Formation of an immersed vertical magnetic dipole field": *J. Geologiya I Geofizika*, N 3. (in Russian). Typically, voltage or current pulses that are excited in a transmitter initiate the propagation of an electromagnetic signal in the earth formation. Electric currents diffuse outwards from the transmitter into the surrounding formation. At different times, information arrives at the measurement sensor from different investigation depths. Particularly, at a sufficiently late time, the transient electromagnetic field is sensitive only to remote formation zones and does not depend on the resistivity distribution in the vicinity of the transmitter (see Kaufman et al., 1983). This transient field is especially important for logging. A comprehensive study of deep-reading transient EM in wireline measurements has been conducted and discussed by Geldmacher et al., 1997 ("Single well (deep-reading) EM system." Report on the pre-feasibility study, Western Atlas, Inc.). Use of a symmetric logging tool using transient field

measurements for formation detection is discussed in U.S. Patent No. 5,530,359, issued to Habasby et al.